

Before the  
**Federal Communications Commission**  
Washington, DC 20554

In the Matter of	)	
	)	
Space Exploration Holdings, LLC	)	Call Sign: S2983
Application for Approval for Orbital	)	File No. SAT-LOA-20161115-00118
Deployment and Operating Authority for the	)	
SpaceX NGSO Satellite System	)	
	)	
The Boeing Company	)	Call Sign: S2977
Application for Authority to Launch and	)	File No. SAT-LOA-20161115-00109
Operate a Ka-band Non-Geostationary	)	
Satellite Orbit System in the Fixed-Satellite	)	
Service and in the Mobile-Satellite Service	)	

**REPLY COMMENTS OF INTELSAT LICENSE LLC**

Intelsat License LLC (“Intelsat”), pursuant to Section 25.154 of the rules of the Federal Communications Commission (“FCC” or “Commission”)<sup>1</sup> and the Commission’s May 26, 2017 public notice,<sup>2</sup> submits these reply comments on the application of Space Exploration Holdings, LLC (“SpaceX”) for operating authority for a non-geostationary orbit (“NGSO”), low-Earth orbit (“LEO”) satellite system in the Fixed-Satellite Service (“FSS”) using Ku- and Ka-band frequencies<sup>3</sup> and the application of The Boeing Company (“Boeing”) for operating authority for an NGSO satellite system in the FSS and Mobile-Satellite Service (“MSS”) using Ka-band

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<sup>1</sup> 47 C.F.R. § 25.154.

<sup>2</sup> *Satellite Policy Branch Information; Applications Accepted for Filing; Cut-Off Established for Additional NGSO-Like Satellite Applications for Petitions for Operations in the 12.75-13.25 GHz, 13.85-14.0 GHz, 18.6-18.8 GHz, 19.3-20.2 GHz, and 29.1-29.5 GHz Bands*, Public Notice, DA 17-524 (May 26, 2017).

<sup>3</sup> Space Exploration Holdings, LLC, *Application for Approval of Orbital Deployment and Operating Authority for the SpaceX NGSO Satellite System*, File No. SAT-LOA-20161115-00118 (Call Sign S2983) (filed Nov. 15, 2016) (“SpaceX Application”).

frequencies.<sup>4</sup> Intelsat agrees with certain points raised by OneWeb in its comments -- specifically, that the Commission should not waive the milestone and domestic coverage requirements.<sup>5</sup> Moreover, given that changes to the milestone requirement are under consideration in the pending NGSO rulemaking proceeding, it would be premature for the Commission to address that issue in individual applications.

**I. THE COMMISSION SHOULD DENY SPACEX'S AND BOEING'S REQUESTS FOR WAIVER OF THE SIX-YEAR MILESTONE REQUIREMENT**

SpaceX and Boeing seek waiver of the Commission's milestone requirement that an NGSO licensee launch and operate all of its proposed space stations within six years of the license grant.<sup>6</sup> Granting such waiver would undermine the rule's purpose to prevent warehousing of spectrum, unfairly place competing applicants at a competitive disadvantage, and render coordination among NGSO applicants more difficult. The more appropriate venue for considering revising the six-year milestone requirement is the Commission's currently pending NGSO rulemaking proceeding. SpaceX's and Boeing's waiver requests should therefore be denied.

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<sup>4</sup> The Boeing Company, *Application for Authority to Launch and Operate a Ka-band Non-Geostationary Satellite Orbit System in the Fixed-Satellite Service and in the Mobile-Satellite Service*, File No. SAT-LOA-20161115-00109 (Call Sign S2977) (filed Nov. 15, 2016) ("Boeing Application").

<sup>5</sup> See Comments of WorldVu Satellites Limited, File No. SAT-LOA-20161115-00118 (June 26, 2017), at 2-7, 16-24 ("OneWeb Comments on SpaceX Application"); Comments of WorldVu Satellites Limited, File No. SAT-LOA-20161115-00109 (June 26, 2017) ("OneWeb Comments on Boeing Application").

<sup>6</sup> See 47 C.F.R. § 25.164(b); SpaceX Application, Waiver Requests at 8-10; Boeing Application, Narrative at 23-25. Although Boeing failed to properly request a waiver of Section 25.164(b) of the Commission's rules, Boeing's request "that the Commission establish a different schedule" for launching and operating its space stations effectively constitutes a request for waiver of the Commission's milestone requirement. See Boeing Application, Narrative at 23.

The Commission’s milestone requirement “is intended to ensure timely provision of service, and to prevent ‘warehousing’ of spectrum and orbital resources” that can “hinder the availability of services by blocking entry by another party committed and able to proceed.”<sup>7</sup> SpaceX and Boeing seek to bypass completely the Commission’s milestone requirement by requesting an indefinite amount of time to launch and operate their respective satellite networks. SpaceX proposes deploying just over one-third of its contemplated satellite constellation by the six-year milestone deadline, with no subsequent requirement to deploy its remaining 2,825 satellites.<sup>8</sup> Boeing proposes to deploy an even smaller proportion of its constellation -- just one-sixth -- by the six-year milestone deadline and an additional twenty satellites within ten years, with no subsequent requirement to deploy any of its remaining thirty satellites.<sup>9</sup> Granting SpaceX’s and Boeing’s requests for waiver of the Commission’s milestone requirement would therefore undermine the rule’s purpose to prevent warehousing of spectrum and orbital resources, which in turn “reduc[es] output of satellite services in the near term and discourag[es] innovation over the longer term.”<sup>10</sup>

Granting SpaceX’s and Boeing’s waiver requests would also provide these companies with an unfair competitive advantage over competing NGSO applicants that raised funding, allocated capital, commenced satellite construction, and planned launch schedules all in

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<sup>7</sup> *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters*, Notice of Proposed Rulemaking, FCC 16-170, ¶ 31 & n.77 (2016) (“*NGSO NPRM*”).

<sup>8</sup> See SpaceX Application, Waiver Requests at 9-10.

<sup>9</sup> Boeing Application, Narrative at 23-25.

<sup>10</sup> *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Further Notice of Proposed Rulemaking, 29 FCC Rcd 12116, ¶ 19 (2014).

accordance with the Commission’s longstanding six-year milestone deadline.<sup>11</sup> As noted by OneWeb, it would also render coordination among NGSO applicants more difficult because “[t]he need to account for numerous potential phased deployments of satellites whose operational status remains uncertain for an indefinite period” would create “an orbital environment that is unpredictable and constantly in flux.”<sup>12</sup>

Moreover, the ongoing NGSO rulemaking proceeding is the more appropriate venue for the Commission to consider any changes to the six-year milestone requirement. The Commission has already “significantly reduce[d] the burden for licensees” by eliminating its interim satellite construction and deployment milestone rules<sup>13</sup> and has further proposed “to modify the six-year milestone obligation for NGSO systems to require the launch and operation of a percentage of the authorized constellation sufficient to provide substantial service to the public.”<sup>14</sup> Thus, this rulemaking proceeding is already considering the relief requested by SpaceX and Boeing and any modifications to the FCC’s build-out requirements equitably will apply to all licensees. To the extent that final rules adopted in that proceeding become effective subsequent to the date of grant of authority to SpaceX or Boeing, the Commission can allow existing licensees to submit a letter requesting to replace their current milestones with the new

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<sup>11</sup> See OneWeb Comments on SpaceX Application at 6; OneWeb Comments on Boeing Application at 6.

<sup>12</sup> OneWeb Comments on Boeing Application at 6; *see also* OneWeb Comments on SpaceX Application at 6-7.

<sup>13</sup> See *Comprehensive Review of Licensing and Operating Rules for Satellite Services*, Second Report and Order, 30 FCC Rcd 14713 (2015), *corrected*, 30 FCC Rcd 14713, ¶¶ 3, 52-69 (“*Part 25 Second Report and Order*”).

<sup>14</sup> *NGSO NPRM* at ¶ 32.

ones.<sup>15</sup> For all of these reasons, SpaceX’s and Boeing’s requests for waiver of the Commission’s six-year milestone requirement should be denied.

## **II. THE COMMISSION SHOULD DENY SPACEX’S REQUEST FOR WAIVER OF THE DOMESTIC COVERAGE REQUIREMENT**

SpaceX seeks a waiver of the Commission’s domestic coverage requirement that NGSO FSS systems operating in the Ku- and Ka-bands provide service “on a continuous basis throughout the fifty states, Puerto Rico and the U.S. Virgin Islands.”<sup>16</sup> SpaceX acknowledges that its “Initial Deployment” of 1,600 satellites “will not provide continuous coverage to the northernmost areas covered by the rule (*e.g.*, the 60° to 70° North Latitudes in upper Alaska) until service from one of the more inclined orbital constellations is activated.”<sup>17</sup> Although SpaceX claims that “[o]nce fully deployed, the SpaceX System . . . will provide full-time coverage to virtually the entire planet,”<sup>18</sup> SpaceX conspicuously fails to explain when, if ever, its proposed “Final Deployment” will become fully operational.<sup>19</sup>

Intelsat agrees with OneWeb that the Commission should not waive its geographic coverage requirement for SpaceX.<sup>20</sup> The Commission’s geographic coverage requirement is intended to ensure that the benefits of satellite-based technologies are accessible to all consumers, not just those living in densely populated and affluent areas that are the most cost-effective to serve. As Chairman Pai recently noted, “[a]lthough high-speed Internet access is common in

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<sup>15</sup> See *Part 25 Second Report and Order* at ¶ 86.

<sup>16</sup> See 47 C.F.R. §§ 25.145(c), 25.146(i); SpaceX Application, Waiver Requests at 13-14.

<sup>17</sup> SpaceX Application, Waiver Requests at 14.

<sup>18</sup> *Id.* at 13.

<sup>19</sup> See *id.* at 8-10, 13-14.

<sup>20</sup> OneWeb Comments on SpaceX Application at 16-24.

metropolitan areas, the rural-urban split is stark: 39% of rural Americans lack adequate access.”<sup>21</sup> Closing this “digital divide” is therefore one of the Commission’s top priorities.<sup>22</sup>

Granting SpaceX’s request for waiver of the domestic coverage requirement would undermine this critical policy goal by excluding significant portions of rural Alaska from SpaceX’s coverage area. According to OneWeb’s analysis, SpaceX would be able to cover on average only 34.46% of Alaska, leaving most of the state without access to SpaceX’s proposed service offering.<sup>23</sup> Because granting SpaceX a waiver of the domestic coverage requirement would not serve the interests of rural and underserved populations within the United States, such a result would not be in the public interest. The Commission should therefore deny SpaceX’s request for waiver of the domestic coverage requirement.

### **III. CONCLUSION**

For all of the foregoing reasons, the Commission should deny SpaceX’s and Boeing’s requests for waiver of the Commission’s milestone requirement and SpaceX’s request for waiver of the Commission’s domestic coverage requirement.

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<sup>21</sup> *Connect America Fund*, Report and Order and Order on Reconsideration, 32 FCC Rcd 1624, Statement of Chairman Pai (2017).

<sup>22</sup> See, e.g., FCC Chairman Ajit Pai, “Setting the Record Straight on the Digital Divide” (Feb. 7, 2017), available at <https://www.fcc.gov/news-events/blog/2017/02/07/setting-record-straight-digital-divide>.

<sup>23</sup> See OneWeb Comments on SpaceX Application at 21.

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July 7, 2017

## **CERTIFICATE OF SERVICE**

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